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**Subject:** Technical recommendations for the ERA  
**Date:** 11/23/2005 03:30 PM  
**Attachments:** [11.23.05.ERA cover memo.doc](#)  
[11.23.05.Eco CSM.xls](#)  
[11.23.05.Assessment Endpoint Table changes.xls](#)  
[11.23.05.ERA Approach.doc](#)  
[11.23.05.ERA Data Needs.xls](#)

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Eric, Chip and Joe,

Attached are technical recommendations from the Eco Team on direction to the LWG for the Portland Harbor Ecological Risk Assessment (ERA). The Team's direction includes (1) a management goal and objectives to guide the ERA, (2) a revised ecological conceptual site model, (3) changes to proposed food web structures, (4) changes to the Assessment Endpoint Table, (5) direction on the ERA approach, and (6) high priority data needs to be filled during Round 3 of the Remedial Investigation. In addition, below are some notes related to the attached documents for EPA's consideration (*not to be forwarded to the LWG*).

The Team worked diligently over the last three months to develop this direction, and the agreements that were reached provide a solid foundation for moving forward more smoothly with the ERA in the months to come. Thank you for your careful consideration of these recommendations. If you have any questions, please feel free to contact me or other members of the Eco Team.

Thanks,  
Mikell

**Cover memo** describing the Team's direction to the LWG  
<<11.23.05.ERA cover memo.doc>>

**Attachment A** - The revised Ecological Conceptual Site Model  
<<11.23.05.Eco CSM.xls>>

**Attachment B** - Changes to the Assessment Endpoint Table  
<<11.23.05.Assessment Endpoint Table changes.xls>>

**Attachment C** - Direction on the ERA Approach  
<<11.23.05.ERA Approach.doc>>

**Attachment D** - Data Needs to be filled in Round 3 of the Remedial Investigation  
<<11.23.05.ERA Data Needs.xls>>

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**Additional Notes** (for EPA's consideration only; do not forward to the LWG)

#### **Eco CSM**

Burt provided two main comments on the Eco CSM: (1) that "upland soils" needed to be included as a source, and (2) the definitions for "significant" pathways needed to be revised. On the first point, we changed "on-site surface soil" and "on-site subsurface soil" to "upland surface soil" and "upland subsurface soil," which are listed as secondary sources in the Eco CSM. With this change, we believe that the CSM is complete and that it accurately captures upland soil as a source to in-water habitats and receptors. If Burt believes that "upland soil" needs to be an Exposure Medium with pathway boxes for each receptor, however, then EPA can add that in to this CSM before transmitting it to the LWG.

We defer to Burt's judgment about whether this change is needed, considering how the CSM will be used by us and others in the future.

### **ERA Approach**

The Eco Team's recommendations include direction on key aspects of the approach for conducting the ERA. Not all areas of the ERA approach are included in the Eco Team's recommendations. For example, the approach for assessing risk to lamprey is yet to be decided, as is the approach for assessing risk from groundwater at the site. These are issues that the Eco Team needs to work through over the coming months. Leadership from EPA to help the team in developing these additional areas of the approach is needed. As noted in the cover memo (attached above), the Eco Team intends to provide direction to the LWG on these and possibly other areas of the ERA approach in the coming months.

For assessing risk to sturgeon, in addition to the direction provided in Attachment C, the Eco Team discussed the value of conducting studies to assess adult presence and residence time. Some members of the Team (USFWS, DEQ and the Tribes) support doing radiotelemetry studies on juveniles and adults in the ISA (tagging studies) to reduce our uncertainty about presence and residence time, and to help refine initial risk estimates for adult sturgeon that will likely be too conservative. USFWS and DEQ acknowledged, however, that interpreting the tagging data could be difficult. Other members of the Eco Team either did not support tagging studies in Round 3 (EPA), or are further evaluating the need for additional site specific data (NOAA). EPA suggested notifying the LWG that additional site specific information on presence and residence time could be needed in the future, noting that the LWG may be motivated to start a tagging study sooner rather than later (this is reflected in Attachment C). The Eco Team agreed to notify EPA of our lack of consensus on the need for tagging studies to allow EPA to make a decision on this.

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